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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,041	10/17/2001	Wolfgang Ruf	P21325	3688

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RESTON, VA 20191

EXAMINER

HASTINGS, KAREN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 01/15/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

978041

Applicant(s)

RUF et al

Examiner

HASTINGS

Group Art Unit

1731

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 11-4-02
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-54 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-54 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Note the rejection of the claims as indefinite as 35 USC 112 is withdrawn in light of applicants amendments and remarks. Thus the claims are interpreted that if a polymer has the recited property of either water absorption or heat resistance greater than that of PSU (claims 1+, 26+, 53,54) or heat resistance greater than 120 degrees C which includes PSU (claims 17+, 43+) it will exhibit the recited properties in use as a headbox lamella of high stability, etc.

***Claims 17-19, 51 and 43-45, 52 are rejected under 35***

***U.S.C. § 103(a)*** as being unpatentable over Rodal et al. with AAPA as necessary with Ewald et al.

These claims are rejected for the reasons set forth on pages 4-6 of the last Office action, that is, in summary, Rodell et al. discloses a lamella which may be made from polysulfone. Applicants admit on page 14 of the specification that head box lamella structured end with a dull end is known, but in any event Ewald et al. explicitly teaches that the tip end of a head box lamella may be between 0.2 and 0.5 millimeters. Thus to have used such a dimension for the trailing element of Rodal et al. would have been well within the level of ordinary skill in the art as a conventional dimension for a lamella tip thickness.

*Claims 1-16, 20-42, 46-50, 53 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodal et al. as necessary with AAPA and further in view of Horiki et al.*

These claims are rejected for the reasons set forth on pages 4-6 of the last Office action; however, as these claims have been amended to require a polymer having at least one of a water absorption and heat resistance greater than that of polysulfone, Horiki et al. is now applied. Horiki et al. teaches that thermoplastic type engineering plastics with high mechanical strength and high heat resistance (see e.g. see abstract) include both polysulfone, polyether sulfone and polyetherimide (see for example column 3 line 60 to column 4 line 4). Thermoplastic type engineering plastics as disclosed in Horiki et al. also include polyamide, that is nylon, and polycarbonate. Note this list of thermoplastic type engineering plastic greatly overlaps the list of thermoplastic engineering plastics listed as appropriate in Rodal column 5 lines 1-6 for use as a head box lamella material.

Thus clearly it would have been prima facie obvious to one of ordinary skill in the art to have choosen any appropriate thermoplastic type engineering plastic including those which have at least one of a water absorption and heat resistance greater than polysulfone since Horiki teaches that both polyetherimide and polyethersulphone are appropriate alternative materials to polysulfone and each of these materials inherently has a water

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absorption and heat resistance greater than polysulfone, (as evidenced if even necessary by the table of properties supplied by applicants, and as now set forth in applicants' specification).

Thus absent any evidence of unexpected results from the use of a specific material with the claimed properties clearly falls within well known engineering plastics suitable for use in making such structures as a lamella.

***Claims 15, 16, 41 and 42 are also rejected under 35***

***U.S.C. 103(a)*** as being unpatentable over the references as applied to the claims above, and further in view of Ewald et al. for reasons set forth on page 6 of the last Office action.

***Applicants' arguments filed November 4, 2002 have been fully considered*** but they are not deemed to be persuasive.

With respect to independent claims 1, 26, 53 and 54, applicants' major argument is that Rodal, while listing polysulfone as an appropriate polymer to make a head box lamella, does not teach or suggest use of a material having at least one of a water absorption and a heat resistance *greater than* that of polysulfone. However this is not persuasive since the alternative engineering plastics of polyetherimide, polyethersulphone, etc. are well known alternatives to polysulfone for making structural materials of engineering

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plastic and these materials by definition have these properties greater than that of polysulfone. These materials are known to have high heat resistance and high mechanical strength, properties known to be desirable for a headbox lamella.

Thus to have used these other well known engineering plastics as an alternative material known to those of ordinary skill in the art as an engineering plastic would have been prima facie obvious to one of ordinary skill in the art, especially absent any evidence of criticality and unexpected results from the selection of this particular known engineering plastic material. This is especially noted since the engineering plastic materials listed by Rodell et al. for use in a head box overlap many of the materials listed in Horiki et al. as engineering plastic known materials for high strength and high heat resistance. Again the selection of an appropriate engineering plastic to make the head box lamelli out of would have been prima facie obvious to one of ordinary skill in the art.

Applicants' arguments with respect to now independent claims 17 and 43 is that Rodal does not disclose a dull lamella end as claimed. However Rodal et al. does indeed disclose a dull lamella end; it just does not explicitly teach the dimensions thereof. Ewald et al. is cited since it explicitly teaches that the recited dimensions are known for the end of a head box lamella. Applicants' arguments that the teachings of Ewald are

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not combinable with Rodal since Ewald discloses an element formed of lamination is not persuasive. First of all, Rodal et al.'s head box trailing element may also be formed of laminations but this, in the Examiner's opinion, is not even a relevant or necessary point. The issue is merely whether a structured end section having a dimension as claimed is known for a head box lamella, and the Examiner respectfully submits that both from AAPA and from Ewald et al. such a structured free end is known and that Ewald et al. explicitly discloses that an appropriate dimension for the end point of a lamella lies within the recited dimensions claimed.

***Applicants' amendment necessitated the new grounds of*** rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED

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STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

*Any inquiry concerning this communication* or earlier communications from the examiner should be directed to Examiner Hastings whose telephone number is (703) 308-0470. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on (703) 308-1164. The fax phone number for this Group is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0651.

  
Karen M. Hastings  
Senior Primary Examiner  
Art Unit 1731

KMH/cdc  
January 10, 2003

1/2003